

Amendments to the Specification:

Amend paragraphs at page 14, lines 4 – 19 as follows:

--Brief Description of the Drawings

The invention will now be described by a non-limiting number of figures and examples. In the following,

Fig. 1A shows the porosity structure of a filter body of the Cordierite type,

Fig. 1B illustrates the small number of open and, thus, useful pores on the surface on the filter body shown in Fig. 1A,

Fig. 2A shows the porosity structure of a filter body of the type described in PCT publication number WO 89/09648,

Fig. 2B illustrates the large number of open and, thus, useful pores on the surface on the filter body shown in Fig. 2A,

Fig. 3 illustrates a catalytically active coating on a filter body of the type shown in Fig. 1A,

Fig. 4 illustrates a catalytically active coating on a filter body of the type shown in Fig. 2A,

Fig. 5 illustrates the preferred position of a membrane positioned on the filter body shown in Fig. 2A, and

Fig. 6 illustrates ~~the back pressure generated by a filter body as shown in Fig. 1A, Fig. 2A and Fig. 4~~
a conventional diesel engine soot filter monolith with porous walls, and

Fig. 7 illustrates an open filter structure according to the invention.--

Amend the paragraph beginning at page 14, line 31 as follows:

In Fig. 2A, 2B a powder technology based wall flow filter body 8 is seen. This type of filter body ~~10~~
8 has an improved permeability compared to the type of filter body 1 seen in Fig. 1 due to a controlled pore size creation during manufacturing. Typically, the permeability of this filter body is 30-50% higher is compared to non powder technology based Wall Flow Filters, such as the filter body 1 seen in Fig. 1, as the particles 10 constituting this filter body 8 have the same size and the contact points 12 connect all the particles 10 together only at the contact points 12. SEM investigations show a large number of open and useful pores 14; typically, this number is twice that of the filter body 1 seen in Fig. 1.

Amend the paragraph beginning at page 15, line 31 as follows:

Fig. 6. In a conventional diesel engine soot filter monolith the porous filter wall or filter body 1 receives the gas flow 4 in one direction and accumulates the soot /carbon particles 2 on the top surface of the monolith wall, characterised as a soot cake with a well-defined boundary within the filter material itself. The soot layer or soot/carbon particles 2 starts combustion in the very thin boundary layer 3-6 only with intimate contact with the catalytic active coating and a sufficient temperature. Within the narrow combustion zone carbon monoxide is generated as a result of the combustion and at the same time the oxygen concentration is reduced. Both gases follow the flow direction 7 and are expelled through the exhaust system. The heat generated by the combustion follows direction 7 and the distance from the combustion zone 3 to the unburned soot increases fast. With reduced oxygen levels and lack of unburned soot the combustion slows down. The otherwise intimate contact between the filter wall and soot cake converts into a distance or interval which destroys the necessary contact between the catalytic active coating and soot. The result is the combustion speed being reduced / stopped because of lack of catalytic active coating contact, heat, etc.

Amend the paragraph at page 16, lines 11-19 as follows:

Fig. 7. This invention relies on an very open filter structure, where the gas flow 4 tries to pass the soot particles 2 through with low filtration efficiency. As no well-defined soot cake is generated the soot penetrates into the filter wall and there is no well-defined combustion zone. The combustion takes place inside the filter wall itself, or the combustion zone is on the very grain surface and creates a boundary layer 3 with now same thickness as the filter wall. The boundary layer is only well-defined relative to each wall grain surface and not to the filter wall surface. The membrane 5 20 on the filter wall outlet side ensures that the trapping efficiency is kept high.

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Amend the paragraph at page 16, lines 34-35 as follows:

The paste may be extruded in a water cooled single screw auger extruder with vacuum chamber, into a honeycomb die heads. Extrusion speed may be from 1.5-2 meters ~~pr~~ per minute.